Abstract

A shaft seal structure (17) is provided around an outer circumferential surface of the bearing member (16M, 16FM) located on the cylinder inside of each of the screw rotors (13M, 13FM). The shaft seal structure (17) forms a static pressure seal. A seal gas is introduced between the outer circumferential surfaces of the bearing members (16M, 16FM) and the inner circumferential surfaces (7) of the rotor cylinders of the screw rotors (13M, 13FM) through the bearing members (16M, 16FM).